

3 1/4" AIR MOTOR  
5:1 RATIO  
4" STROKE

## 650310-X TWO-BALL STAINLESS STEEL PUMP 55 GALLON

**IMPORTANT: READ THIS MANUAL CAREFULLY BEFORE INSTALLING,  
OPERATING OR SERVICING THIS EQUIPMENT.**

### SERVICE KITS

- Use only genuine ARO replacement parts to assure compatible pressure rating and longest service life.
- 637041 for repair of Air Motor Section.
- 637010 for repair of Lower Pump 65106.
- 637010-4 for repair of Lower Pump 65106-4.
- 637011 for general repair of Lower Ball Check.

### GENERAL DESCRIPTION

**WARNING:** DO NOT EXCEED MAXIMUM OPERATING PRESSURE OF 750 P.S.I. (51.7 BAR) AT 150 P.S.I. (10.4 BAR) AIR INLET PRESSURE.

**WARNING:** REFER TO GENERAL INFORMATION SHEET FOR ADDITIONAL SAFETY PRECAUTIONS AND IMPORTANT INFORMATION.

- This MODEL MANUAL is one of four documents needed to properly support an ARO pump model. Ref: Part A. 650XXX-XXX-X MODEL (OPERATOR'S) MANUAL, Part B. GENERAL INFORMATION, Part C. MOTOR (OPERATOR'S) MANUAL, Part D. LOWER PUMP END (OPERATOR'S) MANUAL. These forms are available from the factory if needed.
- The two-ball design provides for easy priming of the lower foot valve. The double acting feature is standard in all ARO industrial pumps, material is delivered to the pump discharge outlet on both the up and down stroke.
- The motor is connected to the lower pump end with a spacer tube and solvent cup-this allows for lubrication of the upper packing gland-and to prevent air motor contamination because of normal wear and eventual leakage through the material packing gland.
- Operating at excessive pressures will shorten the life of the pump.

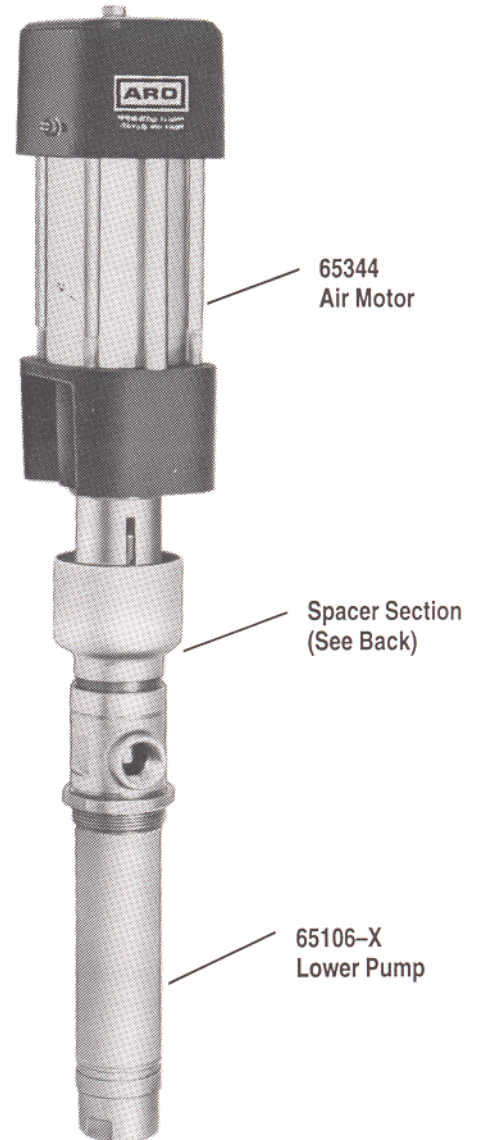


Figure 1

MODEL NO.	LOWER PUMP
650310	65106
650310-4	65106-4

## PUMP DISASSEMBLY

**NOTE: All threads are right hand.**

1. Loosen (C) lock nut and unscrew entire pump from the air motor base. This will expose (A) retaining screw. (Refer to Figure 2.)
2. Unscrew (A) retaining screw to remove pump assembly from air motor.
3. Unscrew (B) shoulder nut to remove (1) retaining screw.

## TROUBLE SHOOTING

### • PROBLEM

\_ Cause, solution.

### • Pump will not cycle.

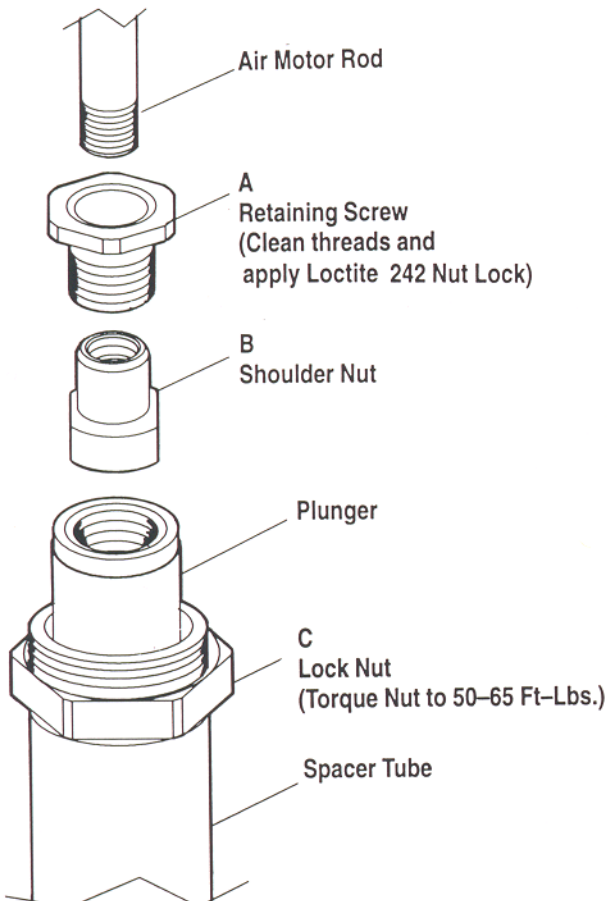
- \_ No pressure to motor, See motor manual.
- \_ Restricted return lines, clean obstruction.
- \_ Damaged motor, service motor.
- \_ Be sure to eliminate any possible non-pump problems before suspecting pump malfunction and continuing.

### • Pump problems will typically occur in one of two areas:

1. The Air Motor Section.
  2. The Lower Pump Section.
- \_ Determine which section is affected.

## SPACER SECTION

ITEM	PART NO	DESCRIPTION
A	90609	Retaining Screw
B	90608	Shoulder Nut
C	90606	Lock Nut



## PUMP ASSEMBLY

**NOTE: Clean all parts thoroughly before assembly.**

1. Slide (A) retaining screw over air motor rod as shown in Figure 2.
2. Screw (B) shoulder nut to air motor rod.
3. Screw (A) retaining screw to lower pump plunger.
4. Screw lower pump end to air motor base.
5. Position air motor exhaust port approximately 90° from lower pump outlet.
6. Screw (C) lock nut to screw lower pump end to air motor.

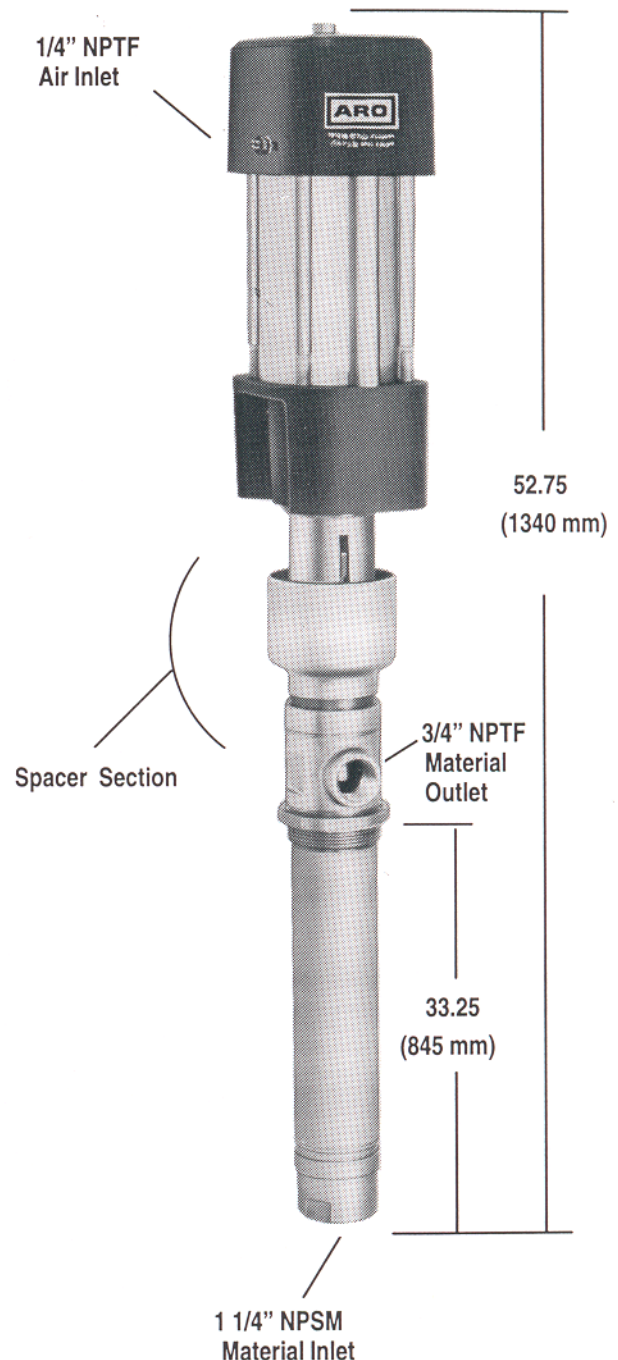


Figure 2